Application No.: 10/822,428 Amendment dated: August 21, 2007 Reply to Office Action of March 21, 2007 Attorney Docket No.: 21295.79 (H5786US)

## Remarks

Claims 1-2 and 5-17 are pending in this application. Claims 1-2 and 5-17 are rejected. By the present amendment, Claim 1 has been amended in various particulars as indicated hereinabove. Claim 17 is canceled without prejudice.

Turning now to the merits, Claims 1-2 and 5-17 have been rejected under 35 U.S.C. 112, second paragraph.

In response to this rejection, regarding item 4 on page 2 of the Office Action Applicants clarify the language of Claim 1 as shown. In particular, it was clarified that the separation points between the portions of the emission spectrum are calculated using the steps outlined in that Claim.

With regard to the rejection specified in item 5 on page 3 of the Office Action, Applicants clarify that the difference is calculated between the intensities of the emission spectrum of one of the dyes present in the sample and the measured emission spectrum of all dyes present in the sample. Please refer, for example, to Figs. 6-8. Shown in Fig, 6 are the emission spectrum 111 of one dye at 357 nm, emission spectrum 112 of the second dye at 357 nm and the emission spectrum 110 of the third dye at the same wavelength, as well as the overall emission spectrum 115 of all three dyes (in the specific illustrative example the inventors consider that three dyes are present in the sample). Fig. 7 shows the same three individual dye spectra at 488 nm, as well as the emission spectrum 116 of all three dyes. Fig. 8 shows the same three individual dye spectra, as well as the overall emission spectrum 117 for all three dyes at 576 nm.

As is then illustrated in Fig. 9, spectrum 115 is the emission spectrum of all dyes present in the sample at one wavelength, spectrum 116 is the emission spectrum of all three dyes in the sample measured at the second wavelength, and spectrum 117 is the emission spectrum of all three dyes measured at the third wavelength.

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Next, as shown in Fig. 10 and 11 and described in paragraphs [0039]-[0041] of

the specification as published on October 21, 2004, the difference between an individual

dye spectrum at a certain wavelength and the measured spectrum of all dyes present in

the sample at the same wavelength is taken. For example, spectrum 120 in Fig. 10 is the

difference between spectrum 111 of an individual dye and spectrum 116 of all dyes (both

spectra are taken at 488 nm). Spectrum 121 in Fig. 10 is the difference between individual spectrum 112 and spectrum 116 (again, both spectra 112 and 116 taken at 488

nm). The squared values of the spectra shown in Fig. 10 are presented in Fig. 11.

Therefore, the amended clarified language of Claim 1 now provides clear

language regarding the difference between intensities of an emission spectrum of an individual dye at a certain wavelength and the measured spectrum of all dyes present in

the sample.

Also, in complying with the Examiner's request, Applicants listed each step

separately to make the language of the claim clearer and easier to follow.

It is believed that pending Claims 1-2, 5-16 are now in condition for allowance.

A Notice of Allowance is respectfully solicited. Should any questions arise, the

Examiner is encouraged to contact the undersigned.

Respectfully submitted,

HOUSTON ELISEEVA LLP

By /Maria Eliseeva/

Maria Eliseeva

Registration No.: 43,328 Tel.: 781 863 9991

Fax: 781 863 9931

Lexington, Massachusetts 02421

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